New England Deaconess Hospital
Boston, Massachusetts

pulse

VOLUME 22 — NUMBER 5 FEBRUARY 1969

Doctors doings

Dr. William McDermott, Jr., General Surgery, Active Staff, presented a lecture before the Royal College of Physicians and Surgeons, January 25, in Vancouver, B.C., Canada.

Dr. W. B. Patterson, General Surgery, Active Staff, appeared in a panel discussion, December 7, on "Up-to-date Management of the Common Lethal Cancers," at the annual meeting of the Main Chapter, AAGP, Portland, Maine.

Dr. Ellison C. Pierce, Jr. Anesthesia, Associate Staff, served as Associate Examiner during the American Board of Anesthesiology Oral Examinations, October 27 through November 1, in Atlanta, Georgia. Dr. Pierce also presented a lecture on "Basic Guidelines in Respiratory Assistance," at a symposium of trauma, American College of Surgeons Meeting, November 15, Atlantic City, New Jersey.

Dr. Robert Sullivan, Internal Medicine, Active Staff, will present a lecture on Current Concepts of Cancer Chemotherapy, March 13, at the fourth annual Cancer Symposium, Akron, Ohio. A trip to Sao Paulo, Brazil, where Dr. Sullivan will be guest speaker at Congressos Integrados de Cancerologia is being planned for September 7 through 13 of this year.

Construction News Briefs

Palmer 2 is sporting its new look. The nursing unit, renovated and enlarged into a 30-bed unit, was completed during the week of February 10, as workmen made last minute adjustments and installations for the official opening of the unit.

A full wall mural, complete with lovely pastel colors, graceful gliding sea gulls and wind blown sail boats, has been mounted in the north corridor of Palmer 2. Colorful flowered wall paper accentuates three walls of the nursing station.

The refurbished unit includes carpeting in the corridors, solarium, nursing station and one patient room. A new lighting system has been incorporated into one semi-private patient room. A modern intercom system for improved communications between patients and nursing personnel has been installed at each bedside.

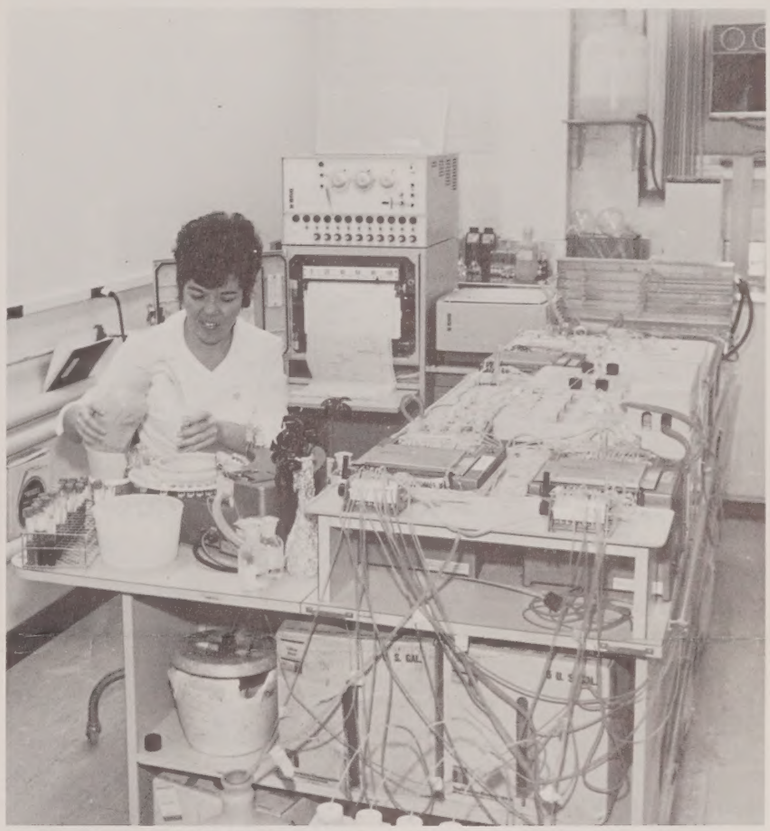
On the steel construction, iron workers are completing the bolting-up process and the decking on the upper levels of the steel structure prior to the pouring of the concrete floors.

In the main kitchen, a new automatic tray assembly line has been set up for the speedy handling of patient food trays.

Pictures on page 4

Colored Solutions Through Plastic Tubing and Chemistry Analysis —

The Multi-Channel Auto-Analyzer



AT WORK AT THE MULT-CHANNEL AUTO-ANALYZER, Medical Technologist Colette Lavoie prepares small plastic cup filled with serum for run through the twelve chemical tests the machine handles automatically.

A maze of tubing covers the side and top of the instrument, and at one end, colored solutions flow steadily through the transparent plastic cylinders, much like the old-fashioned Christmas lights that pulsated colored water and bubbles of air through erect glass baubles.

The multi-channel Auto-Analyzer marks great strides of progress in chemical analysis processing work, for the machine runs 12 consecutive tests per patient serum sample and is able to run analyses on approximately 30 patient samples per hour. These 12 tests are selected to screen the serum for chemical abnormalities and are called the Chemistry Screening Profile.

The processing of blood serum begins with the collection of a tube of venous blood from a patient.

The blood collected is allowed to clot and then centrifuged to separate the cells from the serum. The serum is placed in a small plastic cup on the Auto-Analyzer turntable. Each cup holds an individual patient serum sample and the turntable — which has a capacity of 60 cups — revolves slowly under a sipper nozzle which, in turn, works on one cup at a time, drawing out a small sample of serum to be utilized for the chemical tests.

The Auto-Analyzer divides each serum sample into 12 parts and automatically adds chemicals in proper proportion. Each of the 12 tests are performed in a fixed sequence on each sample in turn.

Traveling through the clear plastic tubes, the serum is guided through a heating bath and a dialyzer. Treated serum changes color and is introduced into a colorimeter system where color intensity is converted into electrical impulses which cause an automatic pen to record peaks on a moving chart. The peaks are read by a technologist and their values are calculated and recorded on a special form which becomes part of the patient's record.

After 6 months of testing and evaluation, the multi-channel Auto-Analyzer has been proven to give accurate results and satisfactory performances. For the past two months it has been in daily use to provide Chemistry Screening Profiles for patients.

Diabetes — Part of Daily Routing at

HOSPITAL TEACHING UNIT

The atmosphere is similar to that of a summer day camp. Children carouse happily through the corridors and laughter rings lightly and often through the rooms. Parents and other adult members of the group take on the role of congenial counselors while medical personnel keep the entire unit together and make it all work.

The place is the Hospital Teaching Unit at the New England Deaconess Hospital, and the members of the group are ambulatory diabetic patients enrolled in the HTU for a concentrated period of medical treatment and specialized instruction dealing with everyday existence and normal functioning with Diabetes.

Ages range from the elderly to the very young. Diabetic children taking part in the program are accompanied and assisted by their mothers during their entire stay at the Unit.

Sunlight filters through the large plate glass windows of the HTU as activity officially begins at the hour of eight. Mealtimes are composed of

(*Continued on Page 2*)

Following the morning meal, patients at the HTU return to their rooms for Doctors' Rounds which take place from 9:30 to 10:30. Then, during quiet consultations with their physicians, patients are given ample opportunity for questions and answers regarding their progress. For the doctors and nurses and technologists at the HTU, the accent is on personal patient care.

Brian and his mother, pictured above, go over diet requirements with Mrs. Boyden, R.N., Teaching Nurse, in their room while waiting for the doctor to visit.

HOSPITAL TEACHING UNIT

(*Continued from Page* 1)

a selective diet to be carefully adhered to, and breakfast — served in the HTU dining room — is the beginning of the full day's activities.

PULSE documented a day's highlights at the Hospital Teaching Unit with the able assistance of one of its patients, two-year old Brian. Along with his mother, Brian kept closely to the schedule of events for the day, interacting with the other patients and generally finding his stay at the HTU to be pretty interesting.

At 10:30 a.m. patients are directed toward the Deaconess building where they receive a Doctors' Lecture. Blood tests to determine blood sugar content are done during this time. While parents of the younger children sit through the class, youngsters like Brian receive assistance with block building and other diversionary projects from Ann Alexkovsky (above), in charge of recreation for children at the Hospital Teaching Unit.

Eleven thirty is almost time for lunch, and in preparation for that, patients gather in the "Rainbow Room" where urine specimens are treated with the proper chemicals to indicate sugar content. Brian handles his own test tube.

Lunch is served from 12 to 1 p.m., followed by a Nurses' lecture back at the Deaconess second floor classroom. At 3:00 p.m., all patients reconvene at the Hospital Teaching Unit for another blood sugar test followed by a leisurely afternoon snack in the dining room. Above, Brian is fortified by his mother and a fresh pack of bubble gum as Cheryl Brindamour, Medical Technologist, goes through the painless procedure of extracting a small sample of blood from Brian's ear lobe, then places sample in labeled test tube for analysis (below, left).

Then it's snack time and Brian takes it nice 'n easy with a newly arrived companion at the HTU, young Scott who most contentedly sipped on his drink and munched on his crackers.

PROFILE: Julie Mackie

ON THE JOB . . . with the usual quantity of purchase orders to be dealt with and a continually busy telephone, Julie Mackie, Purchasing's Buyer Expediter, handles it all with customary aplomb.

At first glance, tall and balmy, ultra-cool Julie Mackie casts images of anything but the staid, hounds-tooth cloak enwrapped Sherlock Holmes.

It is at her desk in the Purchasing Department however, that her manner becomes somewhat reminiscent of that crackerjack sleuth. Determined at the task of ferreting out information dealing with where to get what and how for the Deaconess, Julie Mackie, Purchasing's Buyer-Expediter, is no amateur when it becomes necessary to track down the right company for the right product.

The job is an all encompassing one not entirely devoted to detective work. "It's a matter of receiving requisitions from departments throughout the hospital, sourcing them to determine whom to make the purchase from; editing and pre-pricing items on order, then expediting the purchase orders."

The orders that Julie handles range from non-perishable hospital food to rare drugs for research and patient treatment. It is the more exotic of these hospital requisitions that require Julie to take on the role of super-sleuth.

"Sourcing can be very exciting," says Julie. "Requisitions like the one for Rana catesbeiana tadpoles received from Cancer Research Institute, sent us searching for the company or organization from whom we could make the purchase." Sourcing entails coordinating ideas with Mr. Fisher and Mr. Schiff, then getting on the phone to obtain possible leads to the source of the on-order item. It is often a full day of tracking before results come in. During the quest for tadpoles, Julie's sleuthing led to the Boston Museum of Science, where she received the name of a company that provides the tadpoles. Some companies actually go out and *catch* the tadpoles on order. Under those circumstances the tadpoles are collected according to a prescribed length of legs.

Placing orders for emergency items is one of Julie's routine duties. Orders for Pacemaker heart valves for surgery and Factor VIII Deficient, the blood clotting factor, often involve making calls all over the country. Her main concern is, of course, the delivery date, but as she explains: "Generally the companies realize when it's a life and death situation and they get on it right away." In other instances, "getting a shipment on time requires being quite firm" with the company's representatives.

A member of the Deaconess staff for almost two years, Julie and her husband reside in Arlington. "Leisure time" for Julie is spent taking an evening course at Boston University, where she is finishing up requirements toward her Bachelors Degree, and taking a modeling course at Carol Nashe Model Agency to equip her for some part-time modeling with the agency. Quite accomplished at the sewing machine, the clothes Julie wears testify to her ability — they are generally her own creations.

NEW LIBRARY BOOKS

NONFICTION

Man's Conquest of Space
William R. Shelton

The Restless Ghosts of Ladye Place and Other True Hauntings
Harry Ludlam

This Baffling World
John Godwin

Of Diamonds and Diplomats
Letitia Baldrige

On Reflection
Helen Hayes

FICTION

The Family
Leslie Waller

Savage Sleep
Millen Brand

A World of Profit
Louis Auchincloss

A Man With A Knife
Stanley Winchester

POETRY

Once
Alice Walker

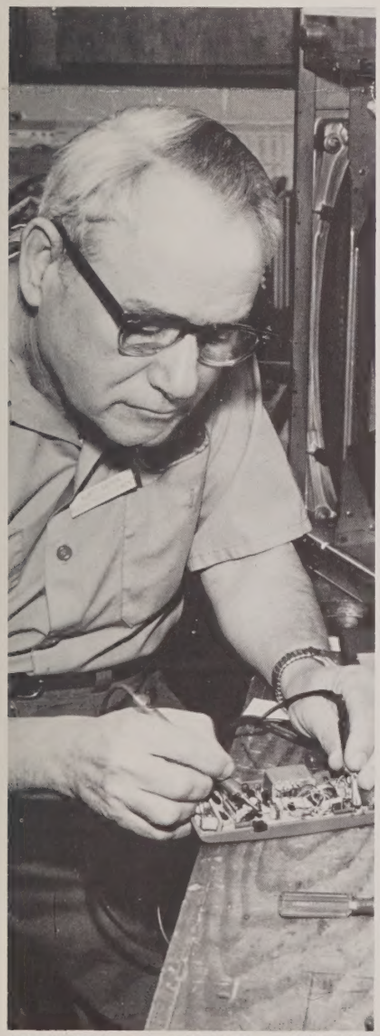
Onions and Roses
Vassar Miller

Division of a Department . . .

ELECTRICAL ENGINEERING

Located on the second floor of the Maintenance and Engineering Building, the Electrical Engineering office is a conglomoration of monitors, an auto generator, volt meter, oscilloscope, tuner and electronic gear that seems suitable for equipping headquarters for a space launch mission-control-center.

CHECKING OUT A MALFUNCTIONING PAGE MASTER, Cully utilizes the "Screen Room" to avoid distracting electrical interference from other instruments and signals around and in the area.



SURROUNDED BY ELECTRICAL COMPONENTS AND EQUIPMENT, Albert Sasson checks over the intricate workings of a dissembled Page Master to locate source of problem.

The electrical "inner sanctum," manned by Mr. Carl Lindgren — better known as "Cully," — and Mr. Albert Sasson, might well be called the heart of the Deaconess electronic complex, for it is from this second floor office that all electrical systems in the hospital are monitored and maintained to assure complete working order.

The scope of responsibility in the Electrical Engineering division of the Maintenance Department is wide indeed. Cully and Mr. Sasson are constantly checking and rechecking the Doctors' Paging System with its fifty speakers throughout the hospital, to assure perfect and complete performance. In addition, the two men service and maintain the page master system, which involves approximately 100 receivers, two encoder machines, and one 30-watt transmitter which, says Cully, "Has a seven to 10 mile range." All televisions in the hospital; nurse saver systems; inter office electronic communications systems; the Joslin Auditorium public address system; slide and motion picture projectors and the music system comprised of about 40 speakers, come under the Electrical Engineering division's watchful eye.

In the division office, alongside the built-in meters in cupboards of wood, supplies of tubes and relay components abound. Cully has fashioned a small "screen room" in the corner of the room, built on a wooden frame and covered with small weave wiremesh. The room, set up with a decoder and other related electrical equipment, prevents electrical interference and allows Cully to test out page master beepers and other electrical equipment free from static and other such sources of disturbance.

In addition, the Electrical Engineering division is often called upon to produce special electrical equipment for the hospital. One such item is the wireless microphone which Cully installed for the benefit of lecturers in the Joslin Auditorium.

Cully, a licensed Master technician, has been with the Deaconess for six years and Albert Sasson, who comes from Rio de Janeiro, Brazil, has been at the Deaconess for one year; together the two men see to it the electrical systems at the Deaconess stay on the beam!

TESTING THE ENCODER which sends off the signals that activate the Page Master receivers, Cully checks frequencies on his oscilloscope. Monitoring dials for Hospital systems are built into woodwork above.

SUGGESTIONS ANYONE???

A revised suggestion plan through which Deaconess Hospital personnel can receive cash awards of up to fifty dollars has been put into operation.

Suggestions submitted will be evaluated and judged according to a point system, under three separate categories: error cause identification, idea bank and safety solutions. Each point accumulated is worth one dollar. The suggestion rating system has been set up as follows:

ERROR CAUSE IDENTIFICATION SECTION

Characteristic of suggestion	*Rating & Point Value*
Value of defect detected	Little: 10 Significant: 25 Substantial: 50
Correct Cause of Error suggested	Incorrect: 5 Partly Correct: 15 Correct: 25
Originality	Not New: 5 Partly New: 10 Entirely New: 15
Class of Error	Minor: 10 Major: 25 Critical: 50

IDEA BANK SECTION

Characteristics of suggestion	*Rating & Point Value*
Labor Savings/Yr.	Point Value: 1/5 $ Saved
Material Savings/Yr.	Point Value: 1/5 of $ Saved
Probable improvement in Quality of Patient Care or in Work Performance	Slight: 10 Moderate: 40 Substantial: 75
Probable Improvement in Working Conditions or Housekeeping	Slight: 5 Moderate: 10 Substantial: 20
Extent of Application	Local: 5 Restricted: 10 General: 20
Utilization of Application	Used Infrequently: 5 Used Frequently: 10
Originality of Idea	Not New: 5 Partly New: 10 Entirely New: 15

SAFETY SOLUTIONS

Characteristics of suggestion	*Rating & Point Value*
Degree of Hazard	Minor: 10 Major: 15 Extreme: 30
Frequency of Exposure	Light: 5 Medium: 10 High: 20
Extent of Application	Local: 5 Restricted: 10 General: 20
Degree of Elimination	Slight: 5 Subsantial: 10 Complete: 20

In addition, a blanket award of ten dollars has been instituted for general suggestions that do not fall within the set catagories.

The Suggestion Committee has revised the suggestion plan award system in hope of encouraging hospital employee participation in bringing to light items related to improvement in patient care, working conditions and particularly those items dealing with hospital and personnel safety.

Construction Views

(*Continued from Page* 1)

Workman puts finishing touches on sea scape mural in newly renovated Palmer 2 north corridor.

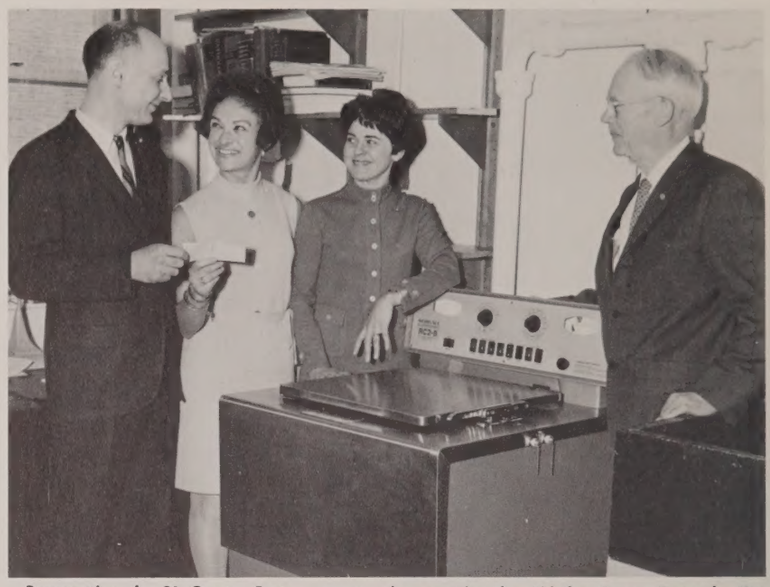
CRI - NEW CENTRIFUGE FOR VIRUS RESEARCH

Box shaped, heavy and firm, the stainless steel and cement grey metal refrigerated centrifuge, located on the 4th floor of the Cancer Research Institute, is the latest addition to the Institute's virus research equipment. The centrifuge was presented to the Cancer Research Institute, February 6, by the Aid for Cancer Research, an organization comprised of 29 Greater Boston women who support innumerable research programs at local hospitals and medical schools by raising urgently needed funds to advance the fight against cancer.

The centrifuge has a plaque affixed to its surface which reads: "In Appreciation of Dr. Shields Warren, Aid for Cancer Research."

Mr. R. D. Lowry, Executive Vice President, Deaconess Hospital, Dr. Shields Warren, Dr. Hermann Lisco, Acting Director of the CRI, Dr. Richard Siegler, Research Associate, CRI, and seven of the women from Aid for Cancer Research, including Mrs. Bernard Frank and Mrs. Morse Klubock, co-chairmen of the presentation, took part in the conferral ceremony.

To be utilized in separating minute virus particles from sections of tissue being analyzed, the centrifuge is capable of performing at speeds up to 2000 revolutions per minute, which translated into movement in a straight line, is equal to the approximate speed of a space rocket rising for the first 100 miles off Cape Kennedy, according to Dr. Warren.



Representing the 29 Greater Boston women who comprise the Aid for Cancer Research, Mrs. Bernard D. Frank and Mrs. Morse Klubock (left to right, center), make the official presentation of the refrigerated centrifuge from their organization to Dr. Richard Siegler, Research Associate, Cancer Research Institute, while Dr. Shields Warren, founder of the Institute and Director from 1951 until January, 1969, looks on.

Automatic conveyor lines, newly installed in main kitchen speed assembly of patient trays.

"Well, we can be thankful it's in its early stages, whatever it is."

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The New England Deaconess Hopsital Complex, including the Medical Office Building at One Ten Francis Street, Lahey and Overholt Thoracic Clinics, the Joslin Diabetes Foundation, Inc., the Cancer Research Institute and the Shields Warren Radiation Laboratory, is internationally known for diagnosis, treatment and research in general medicine, brain and chest surgery, cancer and diabetes.

PULSE is published monthly by the Public Relations Department of the New England Deaconess Hospital.

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Executive Vice President
Richard E. Lee
Director
Evans F. Houghton
Public Relations Director
Frances G. Weil
Public Relations Assistant

Brian at the Hospital Teaching Unit
Story on page 2

New England Deaconess Hospital Bowling League

DIVISION A

Team No.	Pinfall to date Incl. Handicap	Pts.
1—C. Schraub	25441	89
4—D. Colleran	25599	86
3—J. Barr	23951	78
5—M. Hennessey	25123	72
2—J. Dillahant	23785	67

High Singles	
J. Dillahant	116
B. Nickerson	96
High Singles for Year	
R. Ruth	143
B. Nickerson	121

High 3 Strings for Year	
J. Dillahant	341
B. Nickerson	304
High Average for Year	
J. Dillahant	97
B. Nickerson	90

DIVISION B

Team No.	Pinfall to date Incl. Handicap	Pts.
9—E. Nickerson	25315	78
6—B. Laffey	25090	70
7—G. Graham	25098	68
8—M. Coburn	23262	48

High Singles	
R. Peterson	122
G. Graham	94
High Singles for Year	
B. Laffey	130
J. Vaidulas	104
P. Dumont	104

High 3 Strings for Year	
R. Bentley	326
P. Dumont	294
High Average for Year	
R. Bentley	97
B. Laffey	97
P. Dumont	87

DIVISION C

Team No.	Pinfall to date Incl. Handicap	Pts.
10—P. Gleason	25206	73
12—J. Mazza	25229	69
11—P. Hansen	23812	67
14—B. Shapiro	22401	66
13—C. Pihl	12907	22

High Singles	
M. Foley	101
S. Baldwin	103
High Singles for Year	
H. Sycamore	117
S. Meek	122

High 3 Strings for Year	
P. O'Connor	300
S. Meek	319
High Average for Year	
P. O'Connor	89
M. Foley	89
S. Meek	87